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Luzio et al.

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- [54] **MEDICAL DEVICES SUBJECT TO TRIGGERED DISINTEGRATION**
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- [51] **Int. Cl.⁶** **A61M 5/32**
- [52] **U.S. Cl.** **604/265; 623/12; 428/402.22; 604/890.1**
- [58] **Field of Search** **604/264, 265, 604/280, 890.1; 623/1, 11, 12; 424/493, 499; 428/402.2, 402.21, 402.22; 525/56.2, 56, 28, 54**

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[57] ABSTRACT

The present invention provides medical devices comprised of ionically crosslinked polymer, especially, stents, catheter or cannula components, plugs, and constrictors. The medical devices of the present invention are prepared by treatment of ionically crosslinkable polymer compositions with crosslinking ion compositions to provide ionically crosslinked materials.

An important aspect of the present invention is that these medical devices can be disintegrated in-vivo at a desired time through the exposure of the medical device to a chemical trigger which generally is described as an agent that acts to displace the crosslinking ion in the ionically crosslinked material through binding or simple replacement with a non-crosslinking ion.

105 Claims, 3 Drawing Sheets

